

## **Section 12**

### *Closure Plan*

# Facility Conceptual Closure Plan

## *Section 12 – Resource Recovery/Solid Waste Processing Facility Application*

**September 2016**

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## **Attachments**

Attachment I – Conceptual Cost Closure Plan Summary Report



## 1.0 INTRODUCTION

This Facility Conceptual Closure Plan has been developed for the Gold Medal Environmental of DE, LLC (“Gold Medal”) facility in accordance with the requirements specified in 1301 Delaware Regulations Governing Solid Waste (DRGSW) Section 4.4.1.11. This Conceptual Closure Plan will be implemented when the Gold Medal facility ceases accepting recyclable materials. At that time, all of the recyclable materials and commodities will be removed and the facility will be closed in a manner that will eliminate the need for further maintenance at the site (known as “clean closure”).

As the operator of this material recycling facility, Gold Medal has developed this Conceptual Closure Plan to describe the activities that will take place to achieve “clean closure” of the facility. The Plan addresses the cleaning of the facility, including the receiving, processing and shipping areas within the buildings, to ensure that all materials and commodities from the management and handling of recyclable materials are removed and appropriately managed in accordance with applicable regulatory provisions.

Gold Medal will submit a final closure plan that includes a closure plan schedule and the items listed in 1301 DRGSW 4.4.3, at least 180 days prior to the projected date when recyclable material will no longer be accepted at the facility. Closure activities will not commence at the facility until the Department has approved the updated closure plan and the closure schedule and has modified the permit to allow closure activities to be conducted.

A copy of this Conceptual Closure Plan, and all subsequent revisions, will be maintained at the facility, or at some other location designated by Gold Medal, until closure has been completed.

## 2.0 RECYCLABLE MATERIAL REMOVAL

Upon commencement of final facility closure activities, Gold Medal shall cease accepting any further shipments or deliveries of materials for processing or separation at the facility. Subsequently, Gold Medal shall inventory the commodities onsite to determine an estimated

quantity of material that must be removed under the Closure Plan. Proper documentation of the removal of onsite inventories will be maintained and incorporated into the final closure report. All material removed offsite will be shipped to an appropriate facility for reuse/recycling and/or disposal. The processed recyclable material, included in the onsite inventories at the time of closure, has a market value and will be delivered to an appropriate end-use market at a zero cost for transportation and disposal. The cost to load the material for transportation will be \$1.00/ton. In addition, a \$10.00/ton transportation fee has been included in the closure cost estimate to account for the cost of a third party contractor delivering the recycled commodities to the end use facility.

Gold Medal is seeking to increase the storage capacity at the facility by adding ten (10) 20 cubic yard roll-off boxes outside of the Process Buildings. Each roll-off box is assumed to contain approximately 10 tons of processed recyclable material. The facility is also planning to add approximately 17 box van trailers for the storage of processed recyclable materials with each trailer containing approximately 10 tons of processed material.

Under this Plan, Gold Medal has assumed the maximum amount of out-throws remaining onsite (based on the facility Operations Plan) will not exceed 500 tons. This material will be transported to a municipal waste landfill for proper disposal. The cost estimate associated with loading, transporting and disposal of this material is \$76.00/ton.

Provided as Attachment I is the Conceptual Closure Cost Summary Table which outlines the closure costs as estimated above.

### **3.0 CLOSURE/CLEANING PROCEDURES**

Under this Closure Plan, Gold Medal will clean all receiving, processing and shipping areas to ensure that all residues from the management of recyclable materials are removed. This cleaning will generally be performed in accordance with the procedures outlined below in Section 3.1.



All closure procedures will be conducted in accordance with recognized and accepted industry standards applicable at the time of closure. Any contractors used to perform tasks and/or procedures identified in the Closure Plan will have suitable experience, training and familiarity with this Plan to adequately conduct the specified onsite operations. Onsite monitoring of any activities conducted by contractors will be performed by Gold Medal management personnel, or a qualified engineering consultant or contractor who is familiar with both the applicable DNREC regulatory provisions and the site specific closure requirements, to ensure that these activities are consistent with requirements specified in this Plan.

### 3.1 Cleaning Procedures

After all the inventories of recyclable materials have been removed from the facility, Gold Medal will begin the task of cleaning the receiving, processing, shipping areas and equipment. This may be performed by an independent contractor. Appropriate safety precautions will be employed during all cleaning activities. All residue and debris will be removed by physical means. The floors of the receiving, processing and shipping areas will be swept and all debris will be removed and properly managed.

Following the physical removal of all residue and debris, the facility and equipment will be inspected for evidence of leaks or spills. All processing equipment will be located on the processing area which is constructed with concrete floors. Additionally, these areas and associated equipment will have been properly maintained and inspected during the active life of the facility. Therefore, evidence of leaks and spills are not anticipated.

If evidence of leaks and spills are detected, the specific areas will be power washed and rinsed with a suitable detergent to remove any staining. Areas where cleaning activities are conducted will be inspected to ensure that the cleaning is complete. Any remaining equipment or structures will be properly secured at the facility or removed from the site.

Waste products (residues) generated in this decontamination process will be appropriately managed in accordance with applicable state and federal regulations.

## 4.0 CLOSURE CERTIFICATION AND SCHEDULE

The entire closure procedure, from inventory/inspection to securing the site after decontamination, will be completed in approximately ninety (90) days. Gold Medal will **not** allow the closure to extend beyond one year unless specifically authorized by the Department.

A professional engineer will certify that the final facility closure was completed in accordance with the facility's approved closure plan. This PE certification and any accompanying reports and documentation will be submitted to the Department following the completion of all onsite closure activities.

## 5.0 POST-CLOSURE CARE

Based on the nature of the materials to be processed and recycled at the facility, it is anticipated that once all commodities and recyclable materials have been appropriately removed and decontaminated in accordance with this Closure Plan, the facility should be considered "clean closed" following the issuance of the PE certification. Accordingly, no post-closure care is expected at this time.

If during closure activities any areas are identified where contamination cannot be reasonably removed, Gold Medal will submit a post-closure care plan for the Department's approval.

## **Attachment I**

### *Conceptual Closure Cost Summary*



## Conceptual Closure Cost Summary Table

<u>Item/Task</u>	<u>Estimated Volume</u>	<u>Unit Cost</u>	<u>Transportation</u>	<u>Loading</u>	<u>Total</u>
Removal of Processed Commodities/Products from Single Stream Recyclables (paper, metal, plastic, etc.)	0 tons	00.00/ton	10.00/ton	1.00/ton	\$ 0
Disposal of Source Separated Single Stream Out-throws	300 tons	85.00/ton	6.25/ton	1.00/ton	\$ 27,675.00
Disposal of C&D Recyclable Materials	5,000 tons	59.50/ton	10.00/ton	1.00/ton	\$ 352,500.00
Disposal of C&D Out-throws	200 tons	59.50/ton	10.00/ton	1.00/ton	\$ 14,100.00
Loading and Transportation of Processed Separated Commodities from Roll-Off Containers	100 tons	10.00/ton	Included	1.00/ton	\$ 1,100.00
Loading and Transportation of Processed Separated Commodities from Trailers	170 tons	10.00/ton	Included	1.00/ton	\$ 1,870.00
Process Building No. 1 Decontamination					\$ 1,600.00
Process Building No. 2 Decontamination					\$ 400.00
<b>Total:</b>					\$ 399,245.00

### Assumptions:

- All loading costs are estimated to be \$1.00 ton. This includes an operator utilizing a fork lift or loader to load transportation vehicles. The transportation costs are estimated to be \$10.00/ton.

2. Based on the facility's permit, the maximum storage of processed/commodities will not exceed 5,000 tons. For the purposes of estimating potential costs at the time of closure, it is assumed that 100% (5,000 tons) will be from C&D recyclable materials.
3. The Maximum storage of out-throws permitted at the facility is 500 tons. For the purposes of estimating disposal and removal costs, it is assumed that 300 tons are from single stream out-throws and 200 tons are C&D out-throws. Disposal of single stream out-throws – Assumes tipping fee at DSWA of 85.00/ton plus 6.25/ton transportation fee and the \$1.00/ton loading fee from Note 1 above. Disposal of C&D out-throws – Assumes tipping fee at Waste Management DRPI of \$59.50/ton transportation and disposal and the \$1.00/ton loading fee from Note 1 above.
4. Commodities that are recovered from single stream recyclable materials are saleable items that have a net value upon removal. Consequently, these materials are assumed to have zero cost for reuse and \$10.00/ton transportation.
5. Processing Building No. 1 cleaning costs are based on cleaning approximately 22,000 sq/ft (receiving, processing areas and shipping areas) of the facility. The cost assumes 2 people at \$50.00/hour for two (2) eight hour days.
6. Process Building No. 2 cleaning costs are based on cleaning approximately 700 sq/ft (receiving, processing areas and shipping areas) of the facility. The cost assumes 2 people at \$50.00/hour for four (4) hours.